

General

Title

Prevention and management of obesity for adults: percentage of patients with BMI greater than or equal to 25 who have 30 minutes of any type of physical activity five times per week documented.

Source(s)

Fitch A, Everling L, Fox C, Goldberg J, Heim C, Johnson K, Kaufman T, Kennedy E, Kestenbaum C, Lano M, Leslie D, Newell T, O'Connor P, Slusarek B, Spaniol A, Stovitz S, Webb B. Prevention and management of obesity for adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2013 May. 99 p. [161 references]

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients age 18 years and older with body mass index (BMI) greater than or equal to 25 who have 30 minutes of any type of physical activity five times per week documented.

Rationale

The priority aim addressed by this measure is to increase the percentage of patients age 18 years and older with a body mass index (BMI) greater than or equal to 25 who have improved outcomes from the treatment.

Obesity is a chronic, multifactorial disease with complex psychological, environmental (social and cultural), genetic, physiologic, metabolic and behavioral causes and consequences. The prevalence of

overweight and obese people is increasing worldwide at an alarming rate in both developing and developed countries. Environmental and behavioral changes brought about by economic development, modernization and urbanization have been linked to the rise in global obesity. The health consequences are becoming apparent.

Obesity is a national epidemic in the United States with 78 million obese adults. In 2009 to 2010, the prevalence of obesity was 35.5% among men and 35.8% among women. The prevalence of extreme obesity has also increased. Approximately 6% of U.S. adults now have a BMI of 40 kg/m² or higher. One in every three children (31.7%) is overweight or obese. More than one quarter of all Americans ages 17 to 24 are unqualified for military service because they are too heavy. Specifically, 16.9% of children were considered obese in 2009 to 2010. This data is concerning, for the Healthy People 2010 goals for obesity prevalence in the United States were not met.

Physical activity refers to all types and intensities of body movement, including activities of daily living. Exercise, physical fitness and training are terms that suggest elevated intensity, a sense of obligation or sports participation. These terms may have negative connotations for some obese patients. Physical activity is a more inclusive, attainable and acceptable term.

Physical inactivity, or sedentary lifestyle, has been previously identified as an independent risk factor for cardiovascular disease (CVD) by the American Heart Association. Physical inactivity is currently seen as a key contributor to the obesity problem. With approximately 60% of adults in the United States overweight, it is essential to improve physical activity levels for the prevention and management of obesity.

Evidence still remains that increasing calorie expenditure by increasing physical activity is necessary for improved weight-loss outcomes and weight maintenance.

Individual requirements will likely vary, given age, gender, occupational energy expenditure and habitual caloric intake. The current activity recommendation of 30 to 60 minutes of moderate intensity, five days per week, is a reasonable point of departure for an individualized activity prescription.

Evidence for Rationale

Esposito K, Pontillo A, Di Palo C, Giugliano G, Masella M, Marfella R, Giugliano D. Effect of weight loss and lifestyle changes on vascular inflammatory markers in obese women: a randomized trial. JAMA. 2003 Apr 9;289(14):1799-804. [PubMed](#)

Fitch A, Everling L, Fox C, Goldberg J, Heim C, Johnson K, Kaufman T, Kennedy E, Kestenbaum C, Lano M, Leslie D, Newell T, O'Connor P, Slusarek B, Spaniol A, Stovitz S, Webb B. Prevention and management of obesity for adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2013 May. 99 p. [161 references]

Flegal KM, Carroll MD, Kit BK, Ogden CL. Prevalence of obesity and trends in the distribution of body mass index among US adults, 1999-2010. JAMA. 2012 Feb 1;307(5):491-7. [PubMed](#)

Flegal KM, Carroll MD, Ogden CL, Johnson CL. Prevalence and trends in obesity among U.S. adults, 1999-2000. JAMA. 2002 Oct 9;288(14):1723-7. [PubMed](#)

Fletcher GF, Blair SN, Blumenthal J, Caspersen C, Chaitman B, Epstein S, Falls H, Froelicher ES, Froelicher VF, Pina IL. Statement on exercise. Benefits and recommendations for physical activity programs for all Americans. A statement for health professionals by the Committee on Exercise and Cardiac Rehabilitation of the Council on Clinical Cardiology, American Heart Association. Circulation. 1992 Jul;86(1):340-4. [PubMed](#)

Jakicic JM, Clark K, Coleman E, Donnelly JE, Foreyt J, Melanson E, Volek J, Volpe SL. American College

of Sports Medicine position stand. Appropriate intervention strategies for weight loss and prevention of weight regain for adults. Med Sci Sports Exerc. 2001 Dec;33(12):2145-56. [113 references] [PubMed](#)

Miller WC, Koceja DM, Hamilton EJ. A meta-analysis of the past 25 years of weight loss research using diet, exercise or diet plus exercise intervention. Int J Obes (Lond). 1997 Oct;21(10):941-7. [PubMed](#)

National Heart, Lung, and Blood Institute (NHLBI). The practical guide: identification, evaluation, and treatment of overweight and obesity in adults. Bethesda (MD): National Institutes of Health (NIH); 2000 Oct. (NIH Publication; no. 00-4084).

Rejeski WJ, Focht BC, Messier SP, Morgan T, Pahor M, Penninx B. Obese, older adults with knee osteoarthritis: weight loss, exercise, and quality of life. Health Psychol. 2002 Sep;21(5):419-26. [PubMed](#)

U.S. Department of Health and Human Services. The surgeon general's vision for a healthy and fit nation 2010. Rockville (MD): U.S. Department of Health and Human Services, Office of the Surgeon General; 2010 Jan. 21 p.

White House Task Force on Childhood Obesity. Solving the problem of childhood obesity within a generation. White House Task Force on Childhood Obesity report to the President. Washington (DC): Let's Move!; 2010 May.

Primary Health Components

Obesity; body mass index (BMI); physical activity

Denominator Description

Number of patients with a body mass index (BMI) greater than or equal to 25 (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Number of patients with a body mass index (BMI) greater than or equal to 25 who have 30 minutes of physical activity five times per week documented (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

Additional Information Supporting Need for the Measure

- Medical costs associated with obesity were estimated at as much as \$147 billion to \$210 billion a year. Obese persons had estimated medical costs that were \$1,429 higher per person, per year than persons of normal weight.
- Obesity is the second leading cause of preventable death in the United States (U.S.), with only tobacco use causing more deaths. More than 112,000 preventable deaths per year are associated

with obesity.

- Obesity and major depression frequently co-occur. A meta-analysis study showed obesity was found to be an increased risk of depression, and depression was found to be a predictor of developing obesity.
- Several of the comorbidities associated with obesity include type 2 diabetes, heart disease, hypertension, dyslipidemia and certain cancers. The prevalence of various medical conditions increases with those who are overweight and obese.

Evidence for Additional Information Supporting Need for the Measure

Finkelstein EA, Trogon JG, Cohen JW, Dietz W. Annual medical spending attributable to obesity: payer-and service-specific estimates. Health Aff (Millwood). 2009 Sep-Oct;28(5):w822-31. [PubMed](#)

Fitch A, Everling L, Fox C, Goldberg J, Heim C, Johnson K, Kaufman T, Kennedy E, Kestenbaum C, Lano M, Leslie D, Newell T, O'Connor P, Slusarek B, Spaniol A, Stovitz S, Webb B. Prevention and management of obesity for adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2013 May. 99 p. [161 references]

U.S. Department of Health and Human Services. The surgeon general's vision for a healthy and fit nation 2010. Rockville (MD): U.S. Department of Health and Human Services, Office of the Surgeon General; 2010 Jan. 21 p.

Extent of Measure Testing

Unspecified

National Guideline Clearinghouse Link

[Prevention and management of obesity for adults.](#)

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Clinical Practice or Public Health Sites

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

Case Finding Period

The time frame pertaining to data collection is monthly, quarterly, semi-annually or annually.

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Diagnostic Evaluation

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Number of patients with a body mass index (BMI) greater than or equal to 25

Data Collection: Query electronic medical records for patients who have BMI greater than or equal to 25. Focus query for patients who had BMI done 12 months earlier from the measurement period date and were age 18 years or older at the time.

Exclusions

Unspecified

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Number of patients with a body mass index (BMI) greater than or equal to 25 who have 30 minutes of physical activity five times per week documented

Data Collection: Determine the number of those patients who have 30 minutes of physical activity five times per week over a 12-month period from the date of BMI done to the measurement period date.

Exclusions

Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Electronic health/medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Percentage of patients with a BMI \geq 25 who have 30 minutes of any type of physical activity five times per week documented.

Measure Collection Name

Prevention and Management of Obesity for Adults

Submitter

Institute for Clinical Systems Improvement - Nonprofit Organization

Developer

Funding Source(s)

The Institute for Clinical Systems Improvement's (ICSI's) work is funded by the annual dues of the member medical groups and five sponsoring health plans in Minnesota and Wisconsin.

Composition of the Group that Developed the Measure

Work Group Members: Angela Fitch, MD (*Work Group Leader*) (Park Nicollet Medical Group) (Bariatrician); Kathy Johnson, PharmD (Essentia Health) (Pharmacy); Bridget Slusarek, RN, BSN (Fairview Health Services) (Nursing); Jennifer Goldberg, MS, RD, LD (HealthPartners Medical Group and Regions Hospital) (Dietitian); Tracy Newell, RD, LD, CNSD (HealthPartners Medical Group and Regions Hospital) (Dietitian); Patrick O'Connor, MD, MA, MPH (HealthPartners Medical Group and Regions Hospital) (Family Medicine and Geriatrics); Tara Kaufman, MD (Mayo Clinic) (Family Medicine); Claire Kestenbaum, RPh (Park Nicollet Health Services) (Pharmacy); Mike Lano, MD (Ridgeview Medical Center) (Family Medicine); Amber Spaniol, RN, LSN, PHN (Robbinsdale School District #281) (School Nurse); Claudia Fox, MD, MPH (University of Minnesota) (Director of Pediatric Weight Management Program); Dan Leslie, MD (University of Minnesota Physicians) (Surgery); Steven Stovitz, MD (University of Minnesota Physicians) (Sports Medicine); Lynn Everling (Institute for Clinical Systems Improvement [ICSI] Patient Advisory Council) (Patient Representative); Erica Kennedy (ICSI Patient Advisory Council) (Patient Representative); Carla Heim (ICSI) (Clinical Systems Improvement Coordinator); Beth Webb, RN, BA (ICSI) (Project Manager)

Financial Disclosures/Other Potential Conflicts of Interest

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Where there are work group members with identified potential conflicts, these are disclosed and discussed at the initial work group meeting. These members are expected to recuse themselves from related discussions or authorship of related recommendations, as directed by the Conflict of Interest committee or requested by the work group.

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Disclosure of Potential Conflicts of Interest

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Research Grants: None

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Guideline-Related Activities: ICSI Diabetes Guideline

Research Grants: NIH, Diabetes, Hypertension, AHRQ, Bariatric Surgery

Financial/Non-financial Conflicts of Interest: Patent Pending, drug software, blood pressure (BP), Glucose monitoring

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Guideline-Related Activities: None

Research Grants: None

Financial/Non-financial Conflicts of Interest: One time Nursing Education – Ethicon

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Research Grants: None

Financial/Non-financial Conflicts of Interest: None

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Research Grants: None

Financial/Non-financial Conflicts of Interest: None

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2013 May

Measure Maintenance

Scientific documents are revised every 12 to 24 months as indicated by changes in clinical practice and literature.

Date of Next Anticipated Revision

The next scheduled revision will occur within 12 months.

Measure Status

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Prevention and management of obesity (mature adolescents and adults). Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2011 Apr. 98 p.

The measure developer reaffirmed the currency of this measure in January 2016.

Measure Availability

Source available for purchase from the [Institute for Clinical Systems Improvement \(ICSI\) Web site](#)

. Also available to ICSI members for free at the [ICSI Web site](#)

and to Minnesota health care organizations free by request at the [ICSI Web site](#)

For more information, contact ICSI at 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; Phone: 952-814-7060; Fax: 952-858-9675; Web site: www.icsi.org ; E-mail: icsi.info@icsi.org.

NQMC Status

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Production

Source(s)

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